

Application No.: 10/019,068

Docket No.: PVZ-007US

AMENDMENTS TO THE CLAIMS

1-12. (Cancelled)

13. (Previously presented) A tyre balancing composition, which comprises a visco-plastic gel and solid bodies having an average smallest dimension in the range of 0.5-5 mm.

14. (Previously presented) A tyre balancing composition according to claim 13, wherein the solid bodies have an average ratio between their smallest and their largest dimension of $\alpha \leq 2$.

15. (Previously presented) A tyre balancing composition according to claim 14, wherein $\alpha \leq 1.5$.

16. (Previously presented) A tyre balancing composition according to claim 15, wherein α is around 1.

17. (Currently amended) A tyre balancing composition according to claim 13 ~~or 14~~, wherein the average smallest dimension of the solid bodies is in the range of 1-4 mm.

18. (Previously presented) A tyre balancing composition according to claim 17, wherein the average smallest dimension of the solid bodies is around 3 mm.

19. (Currently amended) A tyre balancing composition according to claim 13, wherein the visco-plastic gel has a storage modulus (G') between 1000 Pa and 25000 Pa at 22°C, a loss modulus (G'') smaller than the storage modulus, and a critical yield stress above 3 Pa at 22°C.

20. (Previously presented) A tyre balancing composition according to claim 19, wherein the storage modulus (G') is around 9000 Pa at 22°C, and the critical yield stress is around 30 Pa at 22°C.

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21. (Previously presented) A tyre balancing composition according to claim 13 wherein the solid bodies are shaped as prolate or oblate ellipsoids, cylinders, rectangular paralleipeds, or spheres, or mixtures of such bodies.
22. (Previously presented) A tyre balancing composition according to claim 13 wherein the apparent specific gravity of the solid bodies is in the range of 500-3000 kg/m³.
23. (Previously presented) A tyre balancing composition according to claim 22 wherein the apparent specific gravity of the solid bodies is in the range of 600-2000 kg/m³.
24. (Previously presented) A tyre balancing composition according to claim 23 wherein the apparent specific gravity of the solid bodies is in the range of 700-1000 kg/m³.
25. (Previously presented) A tyre balancing composition according to claim 24 wherein the apparent specific gravity of the solid bodies is in the range of 800-900 kg/m³.
26. (Previously presented) A tyre balancing composition according to claim 13 wherein the solid bodies are made from a material selected from the group consisting of polyolefins, polystyrene, polyvinyl chloride, polyamide, rubber and glass.
27. (Previously presented) A tyre balancing composition according to claim 13 wherein the weight ratio between the solid bodies and the gel is from 10:1 to 1:10.
28. (Previously presented) A tyre balancing composition according to claim 27 wherein the weight ratio between the solid bodies and the gel is from 5:1 to 1:5.
29. (Currently Amended) A tyre balancing composition according to claim 28 wherein the weight ratio between the solid bodies and the gel is from 2:1 to ~~[3:1]~~ 1:3.
30. (Previously presented) A tyre balancing composition according to claim 29 wherein the weight ratio between the solid bodies and the gel is from 1:1 to 1:2.

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31. (Previously presented) A tyre balancing composition kit comprising
 - i) a first container containing a visco-plastic gel, and
 - ii) a second container containing solid bodies having their average smallest dimension in the range of 0.5-5 mm.
32. (Previously presented) A tyre balancing composition kit according to claim 31 wherein the visco-plastic gel has a storage modulus (G') between 1000 Pa and 25000 Pa at 22°C, a loss modulus (G'') smaller than the storage modulus, and a critical yield stress above 3 Pa at 22°C.
33. (Previously presented) A tyre balancing composition kit according to claim 32 wherein the visco-plastic gel has a storage modulus (G') around 9000 Pa at 22°C, and a critical yield stress around 30 Pa at 22°C.
34. (Previously presented) A tyre balancing composition kit according to claim 31 wherein the solid bodies are as defined in any of claims 14-16, 18 or 21-26.
35. (Previously presented) A tyre balancing composition kit according to claim 31 wherein the weight ratio between the amount of visco-plastic gel in the first container and the amount of solid bodies in the second container is from 10:1 to 1:10.
36. (Previously presented) A tyre balancing composition kit according to claim 35 wherein the weight ratio between the amount of visco-plastic gel in the first container and the amount of solid bodies in the second container is from 5:1 to 1:5.
37. (Currently amended) A tyre balancing composition kit according to claim 36 wherein the weight ratio between the amount of visco-plastic gel in the first container and the amount of solid bodies in the second container is from 2:1 to ~~[3:1]~~ 1:3.
38. (Previously presented) A tyre balancing composition kit according to claim 37 wherein the weight ratio between the amount of visco-plastic gel in the first container and the amount of solid bodies in the second container is from 1:1 to 1:2.

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39. (Previously presented) A tyre balancing composition according to claim 13 contained within the air cavity of a motor vehicle tyre.

40. (Previously presented) A method for balancing a motor vehicle wheel assembly comprising applying to the inner surface of the tyre i) a tyre balancing composition according to claim 13, or ii) the components of a kit according to claim 31, mounting the tyre on a tyre rim to form a wheel assembly, and

mounting the wheel assembly on a motor vehicle and driving the vehicle for a distance sufficient to allow the balancing composition to balance the wheel assembly, or mounting the wheel assembly in a device that allows the wheel assembly to be rotated under load conditions similar to those experienced during actual road driving and at a speed where resonance occurs in the wheel assembly, and rotating the wheel for a time sufficient to allow the balancing composition to reduce vibrations to a stable minimum.

41. (Currently amended) A tyre balancing composition kit according to claim 31 wherein the solid bodies ~~are as defined in claim 17~~ have an average smallest dimension of a range of 1-4 mm.

Please add new claim 42 as follows:

42. (New) A tyre balancing composition according to claim 14, wherein the average smallest dimension of the solid bodies is in the range of 1-4 mm.